

ABSTRACT OF THE DISCLOSURE

An integrated evaluation and simulation system interactively evaluates concept design decisions and design requirements in the context of an operational weapon system. The combat effectiveness of a weapon system may also be concurrently tested by virtual simulation. A computer system is programmed to implement a causal network model comprising an integrated collection of analysis models for creating a virtual representation of a weapon system. The integrated evaluation and simulation system includes a user interface operably coupled to at least the computer system to selectively input data into the causal network model and receive information from the causal network model and at least one virtual simulation system. The system further includes either a virtual simulation system operably coupled to the causal network model or, as part of the computer system, a virtual simulation system interface to communicate with a virtual simulation system.